

Amendments to the Specification:

Page 1, please amend the Title of the Invention as follows:

IMPROVEMENTS IN ~~OR RELATING TO~~ PACKET SWITCHES
~~SWITCHING DEVICES~~

Page 1, please insert the following heading after the amended title of the invention:

BACKGROUND OF THE INVENTION.

Page 3, please replace the first full paragraph with the following amended paragraph:

All ingress means transmit in parallel and independently across the cross-bar. Furthermore, cell transmission is ~~synchronised~~ synchronized with a cell cycle, having a period of, for example, 108.8ns.

Page 3, please replace the fourth full paragraph with the following amended paragraph:

The cross-bar controller performs a further task; it serves to schedule the transfer of data efficiently across the cross-bar ~~whilst~~ while maintaining the calculated rates. At the end of each cell cycle, the cross-bar controller communicates with the ingress and egress means as follows. First, the cross-bar

controller calculates and transmits to each ingress means the identity of the next package queue from which to transmit. Secondly, the cross-bar controller calculates and transmits to each egress means the identity of the ingress from which it must receive.

Page 4, before the paragraph beginning "It is therefore an object..." insert the following heading:

SUMMARY OF THE INVENTION

Please replace the paragraph bridging pages 4 and 5 with the following amended paragraph:

The present invention has the advantage that it is faster and more efficient, as the use of slices rather than the significantly larger cells allows relatively low data rates for control channels without the consequent increase in latency of control traffic that use of cells would impose. Also, it removes the need for separate control hardware for the backplane.

Page 5, delete the second full paragraph and insert the following new paragraph and heading:

Other objects, advantages and novel features of the present invention will become apparent from the following detailed description of the invention when considered in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Page 5, before the last full paragraph insert the following heading:

DETAILED DESCRIPTION OF THE INVENTION

Page 7, please replace the second full paragraph with the following amended paragraph:

The cross-bar arrangement 200 is controlled by a cross-bar controller 240 which is physically connected to the backplane 230 via connection 232. The cross-bar controller 240 is also logically connected to each ingress forwarder 212, 214, 216, 218 via logical links 242, 244 and to each egress forwarder 222, 224, 226, 228 via logical link 246. The cross-bar controller 240 ~~co-ordinates~~ coordinates the transmission and reception of cells, via links 242, 244, 246.

Please replace the paragraph bridging pages 9 and 10 with the following amended paragraph:

Data to be transferred across the backplane 230 in the form of slices ~~which~~ are fitted into slice timeslots around the control slice timeslots. For example, if ingress forwarder 212 has eight data slices to transmit, it will place the first slice in the first timeslot before control slice timeslot 312, six slices in the next six

timeslots following the control slice timeslot 312 and the last slice in the timeslot following the control slice timeslot 322. Similarly, for ingress forwarder 214 having eight data slices to transmit, the first three slices will be placed in the three timeslots prior to the control slice timeslot 314 and the remaining five timeslots will be in the five timeslots following the control slice timeslot 314, and so on.